Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled data based on original data using

LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: PORTFOLIO

Report Number: P1320431

Luminaire Tested: LDSQA3D20R409840D010 3LSQCA45R 1MW

Issue Date: 1/29/2026

Test Information

Test Method:	LM-79-2019
Report Number:	P1320431
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-78)
Test Lab:	INNOVATION CENTER
Issue Date:	1/29/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	PORTFOLIO
Catalog Number:	LDSQA3D20R409840D010 3LSQCA45R 1MW
Description:	3in Adjustable LED luminaire with, R40 optic, 4000K CCT AND, 98CRI , 3LSQCA45R 1MW TRIM
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	1764.0 lumens
Efficiency:	N/A
Efficacy:	64.4 lumens/watt
Spacing Criteria (0/90/45):	3.99 / 0.73 / 1.54
Luminous Opening:	Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type:	Direct
Input Watts (W):	27.4
Input Voltage (V):	NR
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	24 FT

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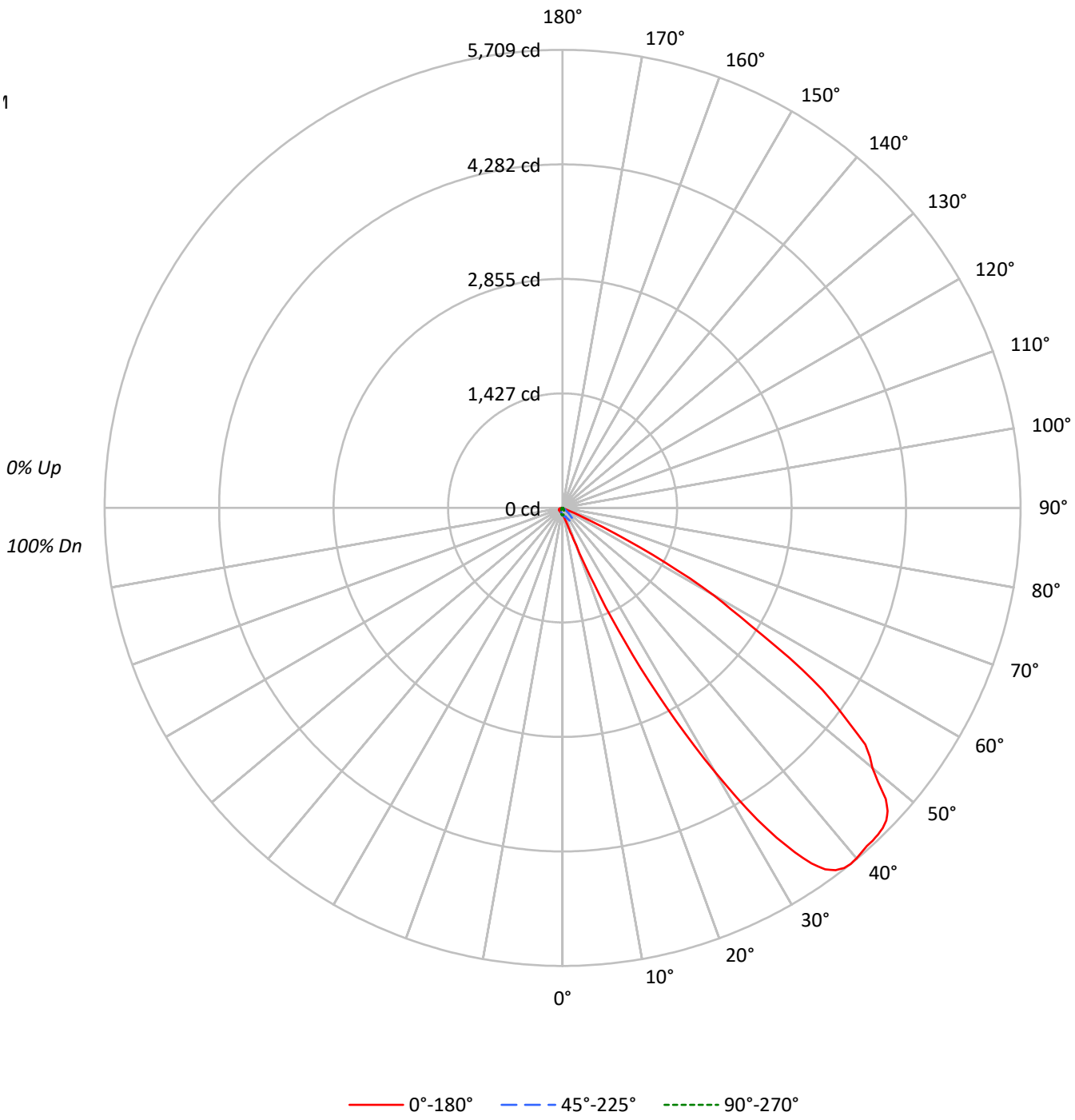
Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20			20			20
RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	72
3	91	81	73	66	89	79	72	66	76	70	65	73	68	64	71	66	62	60
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	50
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	49	44	42
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	62	48	39	32	60	47	38	32	45	37	32	44	37	31	42	36	31	29
8	57	42	33	27	55	42	33	27	40	32	27	39	32	27	38	31	26	24
9	52	38	29	23	51	37	29	23	36	28	23	35	28	23	34	27	23	21
10	48	34	25	20	47	33	25	20	32	25	20	31	24	20	30	24	19	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	15621	15621	15621	15621	15621
5°	17357	16804	15404	14003	13727
10°	20968	17855	14165	12749	12469
15°	34376	19345	12124	11268	11554
20°	90850	22854	10098	10098	10978
25°	350314	28314	8000	9235	10775
30°	755789	37685	6443	9028	10639
35°	1137594	44614	5445	8851	10891
40°	1281635	44807	4744	9105	11646
45°	1374261	34732	4335	9474	12616
50°	1350747	21702	3912	9994	13879
55°	1188313	10689	3903	11200	15554
60°	752165	2239	4478	12262	17291
65°	153836	652	4605	13203	19153
70°	3273	806	4884	14704	22005
75°	3261	2129	5390	16170	24820
80°	3174	1587	6447	17654	28960
85°	3162	3162	12844	19168	32012

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 47°
Luminance: 1399098 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	8.5	0.5
10°-20°	27.9	1.6
20°-30°	137.0	7.8
30°-40°	445.7	25.3
40°-50°	614.4	34.8
50°-60°	427.9	24.3
60°-70°	81.1	4.6
70°-80°	14.7	0.8
80°-90°	6.8	0.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	173.5	9.8
0°-40°	619.1	35.1
0°-60°	1661.4	94.2
0°-90°	1764.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1764.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	91	91	91	91	91	
5°	100	97	89	81	79	10
15°	193	108	68	63	65	70
25°	1844	149	42	49	57	949
35°	5411	212	26	42	52	3270
45°	5642	143	18	39	52	4291
55°	3958	36	13	37	52	3383
65°	378	2	11	32	47	667
75°	5	3	8	24	37	5
85°	2	2	6	10	16	1
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
0°	*90.7*	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7
2.5°	*94.0*	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	92.3	90.7
5°	*100.4*	100.4	100.4	100.4	98.8	98.8	98.8	97.2	97.2	94.0	89.1
7.5°	*106.9*	106.9	106.9	106.9	105.3	103.7	102.1	102.1	100.4	92.3	85.9
10°	*119.9*	119.9	118.3	116.6	115.0	111.8	110.2	106.9	102.1	90.7	81.0
12.5°	*145.8*	142.6	140.9	137.7	132.8	126.4	119.9	115.0	103.7	87.5	76.1
15°	*192.8*	189.5	183.1	173.3	163.6	150.7	139.3	128.0	108.5	82.6	68.0
17.5°	*275.4*	265.7	256.0	239.8	215.5	192.8	168.5	147.4	115.0	77.8	61.6
20°	*495.7*	489.2	430.9	385.6	312.7	260.8	212.2	176.6	124.7	72.9	55.1
22.5°	*1022.2*	954.2	858.6	703.1	547.6	403.4	293.2	221.9	134.5	66.4	48.6
25°	*1843.5*	1736.6	1530.9	1231.2	908.8	643.1	424.4	290.0	149.0	59.9	42.1
27.5°	*2791.2*	2682.7	2363.6	1950.5	1424.0	970.4	605.9	383.9	168.5	53.5	37.3
30°	*3800.5*	3708.2	3303.2	2731.3	2007.2	1359.2	811.6	479.5	189.5	47.0	32.4
31°	*4207.1*	4088.9	3651.5	3042.3	2280.9	1519.5	894.2	520.0	197.6	45.4	30.8
32°	*4581.3*	4446.9	3993.3	3340.4	2502.9	1692.9	985.0	555.7	204.1	42.1	29.2
33°	*4903.7*	4746.6	4309.2	3622.3	2747.5	1854.9	1078.9	589.7	209.0	38.9	27.5
34°	*5177.5*	5041.4	4571.6	3905.8	2964.6	2010.4	1171.3	623.7	212.2	37.3	25.9
35°	*5410.8*	5287.6	4822.7	4121.3	3176.8	2161.1	1255.5	656.1	212.2	34.0	25.9
36°	*5567.9*	5461.0	5039.8	4341.6	3355.0	2289.0	1326.8	685.3	212.2	30.8	24.3
37°	*5653.8*	5550.1	5182.3	4523.0	3530.0	2415.4	1391.6	707.9	210.6	29.2	22.7
38°	*5697.5*	5606.8	5287.6	4670.4	3651.5	2506.1	1448.3	725.8	209.0	25.9	22.7
39°	*5708.8*	*5632.7*	*5354.1*	*4777.3*	*3769.7*	*2596.8*	*1488.8*	*735.5*	*204.1*	*24.3*	*21.1*
40°	*5700.7*	5634.3	5389.7	4872.9	3860.4	2668.1	1517.9	738.7	199.3	21.1	21.1
41°	*5684.5*	5632.7	5415.6	4939.3	3933.3	2713.5	1529.3	732.2	192.8	17.8	19.4
42°	*5670.0*	5613.3	5427.0	4984.7	3983.6	2736.2	1527.6	719.3	183.1	16.2	19.4
43°	*5670.0*	5605.2	5428.6	5013.9	4007.9	2737.8	1508.2	695.0	170.1	14.6	17.8
44°	*5660.2*	5600.3	5436.7	5033.3	4014.3	2723.2	1477.4	669.1	155.5	13.0	17.8
45°	*5642.4*	5579.2	5435.1	5034.9	4003.0	2687.6	1427.2	635.0	142.6	9.7	17.8
46°	*5608.4*	5551.7	5420.5	5023.6	3969.0	2635.7	1367.3	601.0	128.0	8.1	16.2
47°	*5540.4*	5496.6	5381.6	4984.7	3917.1	2559.6	1296.0	562.1	116.6	6.5	16.2
48°	*5423.7*	5392.9	5315.2	4898.8	3818.3	2465.6	1219.9	520.0	105.3	6.5	16.2
49°	*5209.9*	5185.6	5140.2	4761.1	3692.0	2350.6	1137.2	473.0	94.0	4.9	16.2
50°	*5041.4*	5015.5	4923.1	4529.5	3510.5	2204.8	1046.5	426.1	81.0	3.2	14.6
51°	*4929.6*	4887.5	4741.7	4260.6	3246.5	2010.4	947.7	379.1	68.0	3.2	14.6
52°	*4788.7*	4725.5	4544.1	4019.2	3005.1	1816.0	840.8	332.1	59.9	3.2	14.6
53°	*4493.8*	4471.2	4291.4	3760.0	2763.7	1629.7	730.6	293.2	51.8	3.2	14.6
54°	*4236.3*	4202.3	3957.6	3400.4	2501.3	1422.4	617.2	259.2	43.7	3.2	14.6
55°	*3957.6*	3891.2	3674.1	3097.4	2193.5	1231.2	508.7	223.6	35.6	3.2	13.0
56°	*3606.1*	3547.8	3314.5	2773.4	1910.0	1036.8	426.1	183.1	27.5	3.2	13.0
57°	*3178.4*	3125.0	2945.1	2374.9	1615.1	847.3	346.7	147.4	21.1	3.2	13.0
58°	*2765.3*	2705.4	2499.6	1992.6	1304.1	672.3	290.0	119.9	16.2	3.2	13.0
59°	*2447.8*	2366.8	2101.1	1673.4	1020.6	510.3	230.0	95.6	11.3	3.2	13.0
60°	*2183.7*	2117.3	1841.9	1393.2	800.3	375.8	170.1	72.9	6.5	3.2	13.0
62.5°	*1265.2*	1247.4	999.5	717.7	377.5	175.0	84.2	34.0	3.2	4.9	13.0
65°	*377.5*	328.9	256.0	152.3	97.2	58.3	30.8	11.3	1.6	4.9	11.3

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	*11.3*	11.3	11.3	11.3	11.3	11.3	6.5	3.2	1.6	4.9	11.3
70°	*6.5*	4.9	4.9	4.9	4.9	3.2	3.2	1.6	1.6	4.9	9.7
72.5°	*4.9*	4.9	4.9	4.9	3.2	3.2	3.2	1.6	3.2	4.9	8.1
75°	*4.9*	3.2	3.2	3.2	3.2	1.6	1.6	1.6	3.2	4.9	8.1
77.5°	*3.2*	3.2	3.2	3.2	1.6	1.6	1.6	1.6	3.2	4.9	8.1
80°	*3.2*	3.2	1.6	1.6	1.6	1.6	1.6	1.6	1.6	4.9	6.5
82.5°	*1.6*	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	4.9	6.5
85°	*1.6*	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	4.9	6.5
87.5°	*0.0*	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	4.9	4.9
90°	*0.0*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
0°	90.7	90.7	90.7	90.7
2.5°	87.5	85.9	84.2	84.2
5°	84.2	81.0	81.0	79.4
7.5°	79.4	76.1	76.1	76.1
10°	74.5	72.9	72.9	71.3
12.5°	68.0	68.0	68.0	68.0
15°	63.2	63.2	64.8	64.8
17.5°	56.7	58.3	61.6	63.2
20°	51.8	55.1	58.3	59.9
22.5°	48.6	51.8	56.7	58.3
25°	43.7	48.6	55.1	56.7
27.5°	40.5	47.0	51.8	55.1
30°	37.3	45.4	50.2	53.5
31°	37.3	43.7	50.2	53.5
32°	35.6	42.1	50.2	51.8
33°	35.6	42.1	50.2	51.8
34°	34.0	42.1	48.6	51.8
35°	34.0	42.1	48.6	51.8
36°	32.4	40.5	48.6	51.8
37°	32.4	40.5	48.6	51.8
38°	30.8	40.5	48.6	51.8
39°	*30.8*	*40.5*	*48.6*	*51.8*
40°	30.8	40.5	48.6	51.8
41°	29.2	40.5	48.6	51.8
42°	29.2	40.5	48.6	51.8
43°	29.2	38.9	48.6	51.8
44°	29.2	38.9	48.6	51.8
45°	27.5	38.9	48.6	51.8
46°	27.5	38.9	48.6	51.8
47°	27.5	38.9	48.6	51.8
48°	27.5	38.9	48.6	51.8
49°	27.5	38.9	48.6	51.8
50°	25.9	37.3	48.6	51.8
51°	25.9	37.3	48.6	51.8
52°	25.9	37.3	48.6	51.8
53°	25.9	37.3	48.6	51.8
54°	24.3	37.3	48.6	51.8
55°	24.3	37.3	48.6	51.8
56°	24.3	37.3	48.6	50.2
57°	24.3	37.3	47.0	50.2
58°	24.3	35.6	47.0	50.2
59°	24.3	35.6	47.0	50.2
60°	24.3	35.6	47.0	50.2
62.5°	22.7	35.6	45.4	48.6
65°	21.1	32.4	45.4	47.0

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CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
67.5°	21.1	30.8	42.1	45.4
70°	19.4	29.2	40.5	43.7
72.5°	16.2	27.5	37.3	40.5
75°	14.6	24.3	34.0	37.3
77.5°	13.0	21.1	30.8	32.4
80°	11.3	17.8	25.9	29.2
82.5°	8.1	13.0	21.1	22.7
85°	6.5	9.7	14.6	16.2
87.5°	4.9	4.9	8.1	8.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)